

Problem Identification and Performance Measures for Highway Safety Projects

Each year the Utah Highway Safety Office (UHSO) reviews from 50 to 100 project proposals, each seeking funding to reduce traffic crash-related fatalities, injuries and property damage on Utah roads. The seven essential sections for any highway safety proposal will answer these questions:

1. What is the highway safety problem?
2. What is the objective of the proposal?
3. How will you measure your results?
4. What baseline data have you gathered to support your proposal?
5. How and when will you implement your project?
6. What data will you be gathering and analyzing to measure your results?
7. How will you report your results?

Two of the most important aspects of the proposals reviewed by the Highway Safety Office staff are also often the weakest: problem identification and performance measures or targets. This guide is offered to assist potential subgrantees in strengthening their proposals.

IDENTIFY THE PROBLEM:

It may sound obvious but you need to understand the problem you're facing before you can expect to solve it. All too often, decisions are made to propose a project based on a reaction to a single, tragic fatal crash. Effective problem identification serves several important functions:

- The process serves to illuminate whether the problem is a single, tragic incident, or if there is evidence of an ongoing traffic safety problem and the magnitude of it.
- It also provides the information necessary for selecting an appropriate countermeasure and target audience for your proposed project. You will be looking for information on the underlying causes, and the target groups most affected. This information should enable you to select the most effective countermeasure for your proposal.
- It may provide some of the baseline data needed to determine if the proposed project met its objectives. You may start your problem identification with crash data, but you will also need to collect other types of data in order to understand the problem you have and to select the most effective strategy for dealing with it. This might include baseline observations of seat belt use, measures of enforcement levels, public opinion and awareness surveys or speed counts. At this stage, it is also helpful to gather any trend data that may have been collected over the prior few years so that you will be able to show a trend before and after your program.

Note: During the problem identification step, you also lay the foundation for your data collection efforts throughout the project which then facilitates effective evaluation. As you collect your baseline data, it is critical that you carefully document the procedures you follow, so that data collected later in the project can be compared with your baseline. In order for the data to be compared, it has to be collected at the same locations and times of day, using the same collection forms, and ideally the same observers. Failure to follow the same data collection procedures can make it difficult to document your accomplishments.

DEVELOP REASONABLE OBJECTIVES:

Once you have identified the problem and selected a strategy for addressing it, you need to define what you expect to accomplish. Many would argue that this is the most critical step in the proposal process because it illuminates to us what your project's success will be and how it will be measured. To increase your chances of success, ask one of the Highway Safety Office's program management staff what programs have already been done to effectively address your problem.

Volumes have been written on how to write program objectives, each with its own set of do's and don'ts. These rules are all similar and it is not important which set you follow. The one advantage to the list shown below is that it is easy to remember. Program objectives should be SMART (Specific, Measurable, Action-oriented, Reasonable and Time-specific).

1. Objectives should be SPECIFIC. Avoid using generalities like “improving traffic safety” or “increasing awareness.” If you identify exactly what you want to happen, then you can document your success. Sometimes you can be specific about the amount of change you anticipate, expressed either in absolute (increase seat belt use to 75 percent) or relative (increase citations by 15 percent over the baseline) terms. At other times, you can simply observe and record the change in behavior.

2. Objectives should be MEASURABLE. For an objective to be measurable, there must be something you can quantify, like DUI citations, and you must be able to detect a change over time. When possible, isolate the targets of the countermeasure. For example, you want to increase by 10 percent the number of DUI citations issued to young drivers. Make sure to use data that you can obtain or that you can collect if it does not exist in another source.

3. Objectives should be ACTION-ORIENTED. Action is good. You usually can see an action and count the number of times it happens. It is much easier to document that seat belt laws were enforced by counting the number of traffic stops and citations, than it is to document if public support for seat belt law enforcement increased. When resources allow for it, it is ideal to measure behaviors directly related to your objectives.

4. Objectives should be REASONABLE. A small community implemented a public information campaign on the value of traffic safety enforcement. The published objective of this public service campaign was to reduce traffic deaths community-wide. While this would be a desirable outcome, it is not a reasonable one. Public information and education programs can change knowledge, attitudes and awareness, but they have not been shown to change behavior in traffic safety, unless linked to highly visible enforcement. This community should take another look at the problem they are trying to solve, select a specific countermeasure that will address that problem, and then establish a reasonable target for success.

5. Objectives should be TIME-SPECIFIC. Projects don’t last forever and objectives should have deadlines. Deadlines make it clear to everyone when results can be expected. They also keep people focused on what needs to be accomplished by when so it will be very obvious if you meet them or not. They challenge you to accomplish what you set out to do and serve as a constant reminder of your criteria for success. This is all the more reason to be honest and practical when you write them.

SAMPLE OBJECTIVES

Not So Smart	S.M.A.R.T
To encourage increased seat belt enforcement	To increase seat belt citations by 15 percent in 6 months
To reduce underage drinking	To reduce the number of liquor establishments that serve minors by 40 percent in 12 months
To get tough on speeders	To decrease average vehicle speed on Smith Road from 55 mph to 45 mph in 6 months

This is just a summary of the problem identification process, and developing performance measures. Feel free to contact one of the Highway Safety Office’s program managers or coordinators if you need more assistance.